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6.17 WORKER SAFETY

Worker safety is a high priority for the Project. This section presents a description of worker safety practices that will be employed and potential impacts related to construction and operation of the Project. The practices and procedures that will be used have evolved at Duke Energy-owned power plants for many years, achieving an excellent safety record and continuous compliance with all LORS. Duke Energy maintains an extensive health and safety program and will continue to implement this program in support of safe project operations.

To support safe construction practices, the construction contractor will provide a comprehensive site-specific health and safety program that complies with applicable LORS. This plan will directly address the various elements of Project construction, including provisions for a safe work environment to accommodate a peak of approximately 390 construction personnel.

Beneficial factors of the Project related to worker safety are:

- Development of a comprehensive site-specific construction health and safety program.
- Use of proven operations health and safety program.
- Ongoing worker training to assure safe work practices and coordinated emergency response.

6.17.1 EXISTING CONDITIONS

The Project is currently level farmland and generally surrounded by the same land use. On the northeast corner of the Site, the City of Avenal operates a water treatment plant. Duke Energy has a well-developed worker safety program in operation at its other California power plants. Implementation of a similar program at this Project is discussed in the next section.

6.17.2 IMPACTS

Significance criteria were determined based on CEQA, Appendix G, Environmental Checklist Form (approved December 1, 1999) and on performance standards or thresholds adopted by responsible agencies. An impact may be considered significant if the Project results in a substantial increase in worker risk.

6.17.2.1 Construction Impacts

For construction of the Project, Duke Avenal will require construction contractors to develop a comprehensive site-specific health and safety program to protect workers during construction. This program will meet or exceed applicable federal and governmental safety policies and procedures and will have the flexibility to incorporate subcontractor procedures and policies. The construction health and safety program will contain the information required by all LORS. Administration, personal protective equipment, injury prevention, occupational health, fire protection and prevention, and equipment safety are example parts of a construction health and safety program. Appendix 6.17-1 gives an example table of the detailed contents for such a program.

The construction contractor will provide safety professionals who will monitor construction activities in conjunction with the Duke Avenal site manager and assist in implementing the health and safety program. In addition, the construction contractor will assist in managing the safety performance of subcontractors, and will establish with them that safety is a condition of employment. Subcontractors will be required to meet stringent safety criteria as described in their prequalification packages. Subcontractors will be included in all aspects of the worker safety program and will be monitored daily to assure compliance. Major elements of the construction safety program are summarized in the following sections.

6.17.2.1.1 Orientation/Training

A safety orientation/training program for supervisory personnel will be conducted. This program will review safety responsibilities for administering and enforcing requirements of the construction safety program.

Safety orientation will be provided for all craftsmen prior to beginning work on the Site, and will include health and safety topics relevant to construction such as the following:

- Company safety record/policy
- Confined space
- Emergency planning
- Excavations
- Fall protection
- Fire protection
- First aid
- Hazard communication/reporting
- Hearing protection

- Housekeeping
- Injury reporting
- Inspection/audit
- Permitting
- Plant requirements
- Personal protective equipment
- Respiratory protection
- Rigging safety
- Safe driving
- Safety meetings
- Worker involvement

Each construction worker will be issued a copy of Duke Avenal's construction contractor's employee safety handbook and will sign an acknowledgement that the contents are understood.

6.17.2.1.2 Toolbox Meetings

Each worker will be required to attend regular toolbox safety meetings. Specific safety subjects to be discussed will be provided by the safety department or members of the group. Current safety performance and safety issues related to recent, ongoing or future work will be discussed at these meetings.

In addition, there will be weekly supervisors' safety meetings. There also will be Site-wide safety meetings for exchange of information.

6.17.2.1.3 Site Management Supervision Responsibilities

The Duke Avenal Site Manager will have responsibility for health and safety matters during construction. The Site Manager will assure that all levels of supervision recognize and understand their authority and accountability for safety in their work areas.

A key responsibility of the construction contractor will be to enforce safety programs through use of adequate inspections and supervision. Programs that encourage proactive safety awareness with direct line supervision will be implemented, including:

- Weekly meetings with direct line supervision to discuss current accident experience, if any, and other topics related to work assignments.
- Training programs to further align the responsibilities of supervision.

- Supervisors' safety education, which relates accident costs to profitability, with emphasis on workers' compensation, accident prevention, work habits and supervisory methods.
- Planning, Observation and Correction, which is a course to establish a systematic approach for incorporating safety planning into daily activities, observing unsafe acts/conditions and implementing immediate corrective action.

6.17.2.1.4 Project Monitoring Program

Corporate audits will be conducted to assure a safe work site and that supervisors are adequately trained in implementing the safety program. Audits will analyze onsite work practices and evaluate performance.

6.17.2.1.5 Accident/Incident Investigations

An accident or unsafe incident will be investigated to determine its root cause. Methods will be implemented to remediate the root cause.

6.17.2.1.6 Safety Goals

The overall safety goal is an OSHA recordable incidence rate of 1.0 or less and a lost-time incidence rate of 0. Other goals include, but are not limited to:

- Provide safe and healthy working conditions for Site personnel.
- Assure that subcontractors are actively involved in project safety programs and in 100 percent compliance with safety requirements.
- Prevent accidents.
- Eliminate occupational illnesses, injuries.
- Provide medical services.
- Provide fire protection.
- Provide for application of safety rules, regulations and codes governing the construction industry.
- Assure a drug-free workplace.
- Assure that consideration of safety is included in plans, studies, schedules and cost estimates.

6.17.2.2 Operations and Maintenance Impacts

Subsidiaries of Duke Energy are currently operating generating facilities in California. As a result, worker safety policies, procedures and equipment are established and functioning in accordance with all LORS.

Similar procedures and policies will be developed for the Project. These will include, but not be limited to, identification of emergency response personnel, provision of personal protective equipment, and placement of emergency equipment, such as fire extinguishers.

These procedures and policies are described below.

Example policies, programs, procedures, plans and activities are the following:

- **Safety Action Plan for Contractors** - Serves as a guide for contractors to follow in developing their individual safety programs as required by the California Occupational Safety and Health Administration (Cal-OSHA).
- **Plant Safety Committee** - Provides employees an opportunity to identify safety problems and recommend appropriate hazard controls to the Plant Manager. Committee is designed to enable key employees to actively participate in various phases of the safety program, and to utilize their knowledge and experience in formulating recommendations and safety program objectives.
- **Hazard Control Program** - Provides systematic approach to the detection, recording, follow-up and control of hazards.
- **Emergency Eyewash and Shower Equipment Procedure** - Defines a consistent method for routine inspection of emergency eyewash and shower equipment. Procedure assures compliance with regulatory requirements.
- **Light Duty Policy for Industrial and Nonindustrial Injuries or Illnesses** - Procedure that provides guidelines for determining availability of light duty (e.g., desk work), on a case-by-case basis, based on nature and length of the restriction.
- **Confined/Enclosed Space Entry Procedure** - Protects employees entering confined or enclosed areas. The purpose is to verify adequate air quality, provide written rescue procedures and provide specific plant work procedures to assure safe confined/enclosed space entry.
- **Tailgate Briefings Procedure** - Defines consistent format for conducting tailgate meetings that focus on work procedures necessary to safely and efficiently accomplish the job, including identifying and eliminating potential hazards to employees.

- **Drug and Alcohol Abuse Policy for Access** - Protects employees, customers and the general public on Duke Avenal property from harm caused by illegal drugs and alcohol used by non-Duke Avenal personnel.
- **Parking Lot Policy** - Regulates vehicular parking in a safe and orderly fashion to protect vehicles and maintain unobstructed traffic lanes. Policy is enforced by plant security personnel.

Duke Energy Hazard Communication Manuals for existing plants, developed in compliance with CCR Title 8, Section 51949(e), provide information about hazardous substances and their control through a comprehensive Hazard Communication Program, which includes:

- Preparing and maintaining a hazardous materials inventory list.
- Providing Material Safety Data Sheets.
- Training employees.
- Labeling containers.
- Informing employees about hazardous nonroutine tasks.
- Informing contractors about potential hazards and necessary precautions.

6.17.2.2.1 Injury and Illness Prevention Program

An Injury and Illness Prevention Program (IIPP) will be prepared for implementation at the Project. The purpose of the program will be to establish and maintain a safe working environment for employees and contractors.

Managers and supervisors will be responsible for implementing and maintaining the IIPP in their work areas, and for answering any worker questions concerning the IIPP. A copy of the applicable IIPP will be available from each manager and supervisor. In addition, management and supervisory personnel are expected to serve as role models for safety in the workplace.

Employees are responsible for their own safety. Each employee will be required to follow the requirements of the Code of Safe Work Practices Manual and the IIPP, and is expected to comply with Duke Avenal safety and health policies and procedures. Employees will be required to report injuries to their supervisor as soon as possible, but in no case later than the end of the work shift during which the injury occurred.

Contractors will be required to comply with their own company's safety and health policies and procedures. Duke Energy reviews contractor policies to assure compatibility with Duke policies. Duke Energy has an interactive dialogue with the contractor on conflicts or a potential for doing

work differently than described in Duke policies. Safety will be the overriding factor in resolving these kinds of issues.

Duke Energy's regional safety coordinator is responsible for providing input to keep IIPPs current. In addition, the coordinator will provide information to Project management regarding the effectiveness of the safety program(s) and recommendations for improvement.

The safety committee will be responsible for promoting safe working conditions at the plant and for promoting safety awareness among site employees, management and supervisors. The committee will also serve as an avenue for communicating safety concerns and issues.

Safety Committee

Duke Avenal will hold safety committee meetings throughout the period of operation. The frequency of the meetings will be based on need, but will be at least twice per year. The Site safety committee will be made up of a representative number of plant employees.

Safety Training

Duke Avenal will have a safety orientation program for new, contract and permanent employees. Safety training with appropriate handouts will be conducted to minimize the risk of injury to these workers and to inform them of basic emergency procedures. This training will be conducted and documented prior to workers being assigned tasks inside the plant. See the attached safety training matrix (Table 6.17-1) for example training requirements.

Specific training will be provided to supervisors/foremen to familiarize them with safety and health hazards to which their employees may be exposed. In addition, the supervisors/foremen will receive training so they can educate their employees during tailboard and weekly safety meetings about potential hazards around the plant.

Employees will receive additional training whenever a process changes, a new hazard is introduced into the workplace, or when regulatory actions identify new hazards. This training will be conducted in a timely manner and documented.

TABLE 6.17-1
SAFETY TRAINING MATRIX

TYPE OF SAFETY TRAINING	COMPLIANCE	PERSONNEL
Emergency Action and Fire Prevention Plans (initial and when plans change)	8 CCR 3220, 3221	All employees.
Fire Extinguishers	8 CCR 6151	All who are required to use fire extinguishers.
Hazard Communication and Prop 65	8 CCR 5194	All employees.
• Pesticide and/or Fumigation Safety	8 CCR 5194	All who may enter building crawl spaces after fumigation.
• PCB Safety	8 CCR 5194	All who may handle PCBs.
First Aid (includes CPR [multi-year certification])	8 CCR 3400, 1512	Designated first aid attendants.
Bloodborne Pathogens	8 CCR 5193	Designated first aid attendants.
Office (VDT) Ergonomics	8 CCR 5110	Selected departments.
Physical Ergonomics (includes hand arm vibration)	8 CCR 5110	All except estimators, office, clerical, lab employees.
Hearing Conservation	8 CCR 5095-99	Selected departments.
Respiratory Protection	8 CCR 5144	Employees required to wear respirators (welders, confined space workers, etc.).
Confined Spaces	8 CCR 5156-58	Employees who enter underground facilities, transformers, water tanks, etc.
Asbestos Awareness	8 CCR 1529, 5208	Employees who may contact asbestos.
Asbestos Workers	8 CCR 1529, 5208	Painters, building maintenance personnel.
Forklifts (initial training only)	8 CCR 3664	Forklift operators.
Cranes (initial training only)	8 CCR 5006	Crane operators.
Lead	8 CCR 5216, 1532.1	Painters, cable splicers, others exposed to airborne lead.
Hazardous Waste Operations and Emergency Response	8 CCR 5192	Workers at treatment, storage and disposal facilities, hazardous cleanup investigators, or as required by California agencies.
Private Fire Brigades	8 CCR 3411	Employees assigned to plant fire brigades.
Hazardous Chemicals in Laboratories	8 CCR 5191	Lab personnel.
Explosives (users only)	8 CCR 5276	Maintenance, construction personnel.
Other - as identified by need (defensive driving, strains and sprains, vehicle inspection)	Cal/OSHA Section 3203	As needed.

Training will be provided to employees to assure they maintain their safety skills. This training will be conducted annually for compliance or to address deficiencies discovered through work practices, accidents or supervisory recommendations.

Duke Avenal employees will participate in this training as required by their job functions. Safety and health training will be documented and recorded on the Site training record. Records will be maintained as described under Recordkeeping.

Safety Meetings

Duke Avenal employees will attend periodic safety meetings. These safety meetings will include training, discussion of safety issues and concerns, and review of accidents, if any have occurred. The frequency, duration and target audience of the safety meetings will be based on operational and site-specific requirements. Attendance at these meetings will be documented.

Crews and work teams will conduct brief "tailboard" safety meetings daily to discuss assigned jobs and the associated hazards. For tasks that occur with separate work teams working together, a tailboard safety meeting will also be held for that specific job prior to beginning work. Tailboard or daily safety meeting attendance does not require documentation, but at least one crew safety meeting per week will be documented.

Safety Incentive Program

For every month the plant has no OSHA-recordable injury, a plant-wide barbecue or similar benefit will be arranged.

The plant will have a Hazard Awareness drawing where employees submit slips describing different hazards at the plant. Every month an incentive gift will be drawn by some contributing employee. If the plant goes 6 months without an OSHA recordable injury, employees will be given a Circle of Safety recognition.

If an employee does something special to help plant safety performance, the supervisor will recognize the effort by providing the employee an opportunity to pick a safety incentive gift. A gift locker will be stocked for this type of recognition.

Safety Inspections/Hazard Control

Periodic safety inspections will be conducted. Site safety supervisors will coordinate with the site planner/scheduler to arrange for qualified personnel to participate in the inspections. The inspection frequency is determined by plant needs through the safety committee.

Safety inspections will be documented, and records will be retained. A copy of the inspection findings will be forwarded to the site production superintendent and safety supervisors.

Hazards identified through the safety inspection process will be corrected as soon as possible. Hazards that pose an imminent threat or danger will be addressed immediately. While awaiting action, these hazards will be barricaded, tagged out, or otherwise isolated from workers. Employees that could be expected to approach dangerous hazards during the normal course of their duties will be notified verbally or in writing. Actions may include one or more of the following:

- Barricading or marking of the hazard.
- Removal of employees from the area.
- Development of alternative procedures.
- Additional training on the involved equipment.

Findings of the safety inspections will be posted. The inspection report will be reviewed during the next safety committee meeting, and feedback will be solicited from site employees.

Accident Investigations

It is Duke Energy's policy to investigate all accidents that are recordable or are considered a serious "near miss." A serious "near miss" is an incident that would have resulted in a fatality or serious injury if the employee had actually been injured. The accident investigation team will be required to submit an investigation report to Duke Avenal management and the safety committee.

The purpose of the accident investigation is to determine the cause of the accident and offer solutions for corrective action to avoid recurrence. Investigations will be organized as soon as possible following an accident to gather information and facts from the involved parties. Photographs and interviews will be used to assist in the investigation process. The investigating team will use a process that will be outlined in the Occupational Incident Investigation Aid and the Supervisor's Guidelines for Handling Industrial Injuries. For each incident, the supervisor will fill out an Occupational Incident Investigation Form (see Appendix 6.17-2). As necessary, a

Report of Occupational Injury or Illness and Employer's Claim for Workers' Compensation Benefits also may be completed.

Recordkeeping

Employee and contractor safety training will be documented. This documentation will contain at least the following information:

- Trainee's name.
- Company identification or Social Security number.
- Subject of training.
- Date(s) of training.
- Duration (hours) of training.
- Instructor's name.

An Incident (e.g., injury, illness, near miss) Investigation Report will contain at least the following information:

- Name(s) of injured.
- Date and time of the accident.
- Type of accident.
- Extent of injuries or damage.
- Names of crew members and foremen.
- Events leading up to the accident.
- Description of the accident.
- Additional facts surrounding the accident.
- Recommendations to prevent recurrence.
- Root cause of incident.
- Conclusion statement.
- Names and signatures of the investigating team.

Accident reports are considered confidential information. Summaries of the reports, with names of the involved parties removed, may be shared for accident prevention purposes. The original copy of the report will be submitted to the site safety supervisor.

Safety inspections will be documented. An accurate record of hazards observed will be maintained. Safety inspection reports will contain at least the following information:

- Name(s) of the inspector(s).
- Date(s) of the inspection.
- Specific location of hazard.
- Description of hazard or.
- Description of unsafe work practices.
- Corrective actions recommended or taken.

In addition, records will be maintained to document progress in correcting hazards identified during the inspection. A projected date for correction will be set for items that may not be immediately corrected and for subsequent actions put in place to assure each item is addressed in a timely manner.

Safety training records will be maintained, including safety meeting minutes and safety inspection reports for a minimum of 3 years. Accident investigation reports and OSHA 200 logs will be maintained for a minimum of 5 years. Records will be maintained in accordance with CCR Title 8.

Compliance

It is Duke Energy's policy to enforce the provisions of the IIPP. Methods of compliance may include the following:

- Training.
- Prompt action on issues and hazards.
- Audits.
- Investigations.
- Inspections.
- Evaluations.

In addition, corrective action will be taken where appropriate. Safety incentive and recognition programs will be encouraged.

Contractor/Vendor Safety

Contractors and vendors working onsite will be required to provide copies of their safety programs and/or injury and illness prevention program to Duke Avenal prior to beginning work onsite. Contractors and vendors will be held to the same safety standards and requirements as Duke Avenal personnel.

Contractors/vendors performing work at the Project will be provided safety orientation training as outlined in the IIPP prior to commencing work. Contractors will be held responsible for providing their employees with required personal protective equipment, and for assuring their personnel are trained appropriately for the work they are required to perform. This training will be in compliance with applicable laws and sections of CCR Title 8.

Duke Avenal will provide appropriate training to contract employees under its supervision to enable them to perform their jobs safely and to comply with applicable regulations.

Communications

Information concerning safety hazards will be communicated to employees through general postings in the plant, safety meetings and electronic communications.

Duke Avenal will assure communication of information surrounding an injury or near miss following completion of the investigation. Names of the involved parties will be withheld. The intent of this practice is to prevent similar accidents from occurring in the future by raising the awareness level and correcting hazards underlying an accident.

Site personnel will communicate information concerning personal injury, near misses and safety hazards to their supervisor or appropriate authority as soon as possible. Injuries will be documented on an appropriate form (see Appendix 6.17-3).

6.17.2.2.2 Fire Prevention Plan

Fire prevention at the plant will consist of measures to prevent fires, including fire-safe construction, reduction of ignition sources, and control of fuel sources. These measures also include safety procedures such as provision and marking of adequate exits, plus training in safe procedures for operation of equipment and vehicles. In addition, the plant will be equipped with sprinkler systems, fire extinguishers and onsite water and hose systems.

The Kings County Fire Department will have first-responder responsibility for the Project. As such, fire prevention and suppression systems for the Project will be subject to review and approval by that department. The department has a station in the City of Avenal.

6.17.2.2.3 Emergency Response Plan

A Business Plan will be developed for the Project that will contain an Emergency Response Plan with specific procedures to be followed in the event of an emergency situation. Potential emergencies include, but are not limited to, spill or release of hazardous materials, fire, explosion or natural disaster. An example outline of the content of the Emergency Response Plan is provided in Appendix 6.17-4.

6.17.2.2.4 Personal Protective Equipment

Policies and procedures for personal protective equipment will include the following:

- **Personal Protective Equipment Policy** - Safety procedures regarding respiratory protection, eye protection, footwear and head protection. The policy will cover selection of suitable equipment, proper fitting, training, limitations and maintenance.
- **Hard-Hat Policy** - Use, inspection and care of hard hats. The policy will include a replacement schedule for the hard hat shell and suspension, and directions for the placement of decals on the external and internal hard hat shell.
- **Eye and Face Protection Policy** - Requirements for use of approved eye and face protection. The policy will cover numerous types of eye and face protection, fit, inspection and care.

In addition, the SPCC Plan to be developed for the Project will have provisions for accessing protective clothing and equipment approved by National Institute of Occupational Safety and Health including:

- Chemically-resistant apparel, gloves and boots.
- Protective head, eye and face gear.
- Individually fitted half-mask and full-face respirators with various cartridges.
- Self-contained breathing apparatus (available for use only by trained plant personnel).

6.17.2.2.5 Safety Training Programs

6.17.2.2.5.1 Personnel Training

Personnel safety training programs in compliance with CCR Title 22, Section 66264.16 will be developed.

Description

Duke Avenal will manage compliance with training requirements at the Project through an integrated and comprehensive employee training program. The program will consist of trainer qualifications, recordkeeping procedures and a detailed description of employee training requirements. This information will be contained in instructional units provided to employees based on their job activities. The program will consist of classroom instruction and on-the-job training, and will teach employees to perform their duties in a way that ensures worker safety

and facility compliance with local, state and federal regulations. The program will offer over 60 different courses including the following:

- Environmental Training Courses:
 - Hazardous Materials
 - Hazardous Waste
 - Hazard Communication
 - Emergency Response
 - HAZWOPER
- Health and Safety Training Courses
 - Confined Space
 - Clearance Procedures
 - Electrical Safety
 - Hearing Conservation
 - Forklift Training
 - Medical Surveillance
 - Respirator Protection
 - Respirator Fit Testing
 - IIPP

A training matrix will be utilized to determine the training schedule for each year. Except for refresher training, not all courses will be presented every year. This flexibility is necessary to focus training where needed.

An employee training program will be developed that will manage training requirements for employees whose positions are related to hazardous waste management and/or emergencies. The program will meet personnel training requirements specified in CCR Title 22, Section 66264.16 and CCR Title 8, Section 5192. The program will:

- Assure that facility employees with hazardous waste management responsibilities can respond effectively to emergencies. The program will provide initial and refresher training on emergency response.
- Include instruction (both introductory and continuing) that teaches facility employees about hazardous waste handling and management procedures relevant to the positions in which they are employed.
- Provide a job description for each position that has tasks/activities related to hazardous waste management. Job descriptions include skills, qualifications and duties assigned to each employee.
- Describe the type and amount of both introductory and continuing training that will be given to each employee relevant to their hazardous waste management positions.

Training Records (CCR Title 22, Sections 66264.16(d)(4) and (e))

Training records on employees will be kept until closure of the facility. Required documentation, including the full training program description, will be maintained at the Site.

Training Director (CCR Title 22, Section 66264.16(a)(2))

Training will be directed by an environmental specialist. Training will be provided by either an environmental specialist or another professional with knowledge of federal, state and local regulations obtained through specific hazardous waste/materials seminars, technical education and/or experience. The environmental specialist will assure that:

- Employees are trained within 6 months of starting a job assignment that involves the handling or management of hazardous waste.
- Employees who handle hazardous wastes are not permitted to work without supervision until they have successfully completed the required training.
- Employees are retrained annually.

6.17.2.2.5.2 Hazardous Materials Training

The Hazardous Materials Business Plan that will be developed for the Project will provide an outline for an employee training program as it relates to hazardous materials, as described in the following paragraphs.

Methods for Safe Handling of Hazardous Materials:

- Duke Avenal will maintain a formal training program for employees whose jobs are related to hazardous materials management and potential emergencies involving hazardous materials. The program will teach employees to handle hazardous materials safely and will include classroom instruction and on-the-job training. Key aspects of the program include hazard communication, accident prevention, proper use of personal protective equipment and, for some employees, emergency response training. The program will be designed to comply with training requirements of CCR Title 22, Section 66264.16, CCR Title 19, Section 2732, applicable portions of CCR Title 8, and other relevant regulations. Required training documentation will be maintained onsite, including a full description of the program and records of employee training.

Procedures for Coordinating Activities With Response Agencies:

- Employees with responsibilities that include responding to emergencies will be trained in procedures contained in an Emergency Response Plan that will be developed for the Project. The plan will include appropriate onsite and offsite communications and coordination. The roles and coordination with response agencies will be implemented through the Incident Command System described in the Emergency Response Plan.

Proper Use of Onsite Emergency Response Equipment:

- Employees with responsibilities that include responding to emergencies will be trained in procedures contained in the Emergency Response Plan, and in the use and capabilities of emergency response equipment. Training will include information on the location, capabilities and proper use of facility emergency controls, fire suppression equipment, first aid equipment, spill containment and cleanup equipment, and personal protective equipment for response scenarios.

Familiarization With Business Plan and Procedures:

- Employees with responsibilities that include responding to emergencies will be trained in the content and use of the Business Plan. Training will occur, at a minimum, when employees are initially assigned to positions that may involve emergency response to hazardous material releases, and during refresher training that occurs at least annually. Key employees who may have responsibility for directing emergency responses will be provided with copies of the Business Plan.

Provisions for Initial and Refresher Training:

- The training program will be designed to assure that Duke Avenal will maintain full compliance with applicable training requirements of CCR, Titles 8, 19 and 22, and other relevant regulations. Assurance that required initial and refresher training is completed by each employee will be the responsibility of site management. Training records maintained at the Site will provide for documentation that appropriate initial and refresher training has occurred.

6.17.2.2.6 Fuel Handling and Fire Suppression

6.17.2.2.6.1 Fuel Handling and Fuel Storage

Fuels utilized onsite will include natural gas and diesel oil. Natural gas will be used to fuel the gas turbines and for supplemental duct firing in the HRSG. Diesel fuel will be used for vehicles and the standby diesel engine/generator.

Tanks containing petroleum products onsite will be equipped with secondary containment structures. The lube oil reservoirs and turbine generating equipment oil systems will be monitored in the power plant control room. In the event of a problem, both visual and auditory alarms will be triggered.

Power plant operators will perform and document routine SPCC inspections. Appropriate personnel will be trained for SPCC annually. Training will include, but not be limited to, applicable oil pollution control regulations, rules and regulations regarding operation and maintenance of equipment to prevent discharges of oil, and spill response procedures. Onsite security will be designed to prevent unauthorized entry or vandalism that could impact fuel systems. Areas of the site that will contain large quantities of oil will be fully illuminated by automatic lights.

Fuel Delivery

Infrequently, tank trucks will deliver diesel fuel. Diesel fuel will be contained in an aboveground fuel tank that will be filled by tanker truck. Spills during the filling process will be avoided by the following design features and precautions:

- Fuel delivery companies utilize leakproof couplings.
- Drivers are trained to pay constant attention during the transfer process.
- Warning signs at the unloading area caution personnel to completely disconnect all transfer lines and hoses prior to departure.
- Connections are checked for leakage prior to the truck's departure.
- The gasoline and diesel fuel are dispensed at the fueling area by pumps with automatic shutoff valves.

Piping from diesel fuel storage tanks will be double-walled and above ground. Operating personnel will regularly observe aboveground valves and piping, tile conditions of flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, and locking or securing of valves and metal surfaces. Problem areas will be noted for investigation/repair, as appropriate.

Drivers of vehicle traffic will be warned by signs to prevent damage to aboveground piping or other oil transfer operations. In the event of an oil spill, personnel will respond in accordance with measures described in the SPCC Plan.

6.17.2.2.6.2 Fire Suppression

Fire suppression will be provided by portable fire extinguishers and hose reels placed throughout the plant. The emergency fire suppression equipment will be capable of handling the following:

- Electrical fires, using fixed and portable CO₂ extinguisher systems.
- Fuel oil and flammable liquid fires, using fixed and mobile foam systems.
- Other types of fires, using fixed, mobile, portable extinguisher and hose-line water systems.

The procedure for suppression of a small natural gas fire will be as follows:

- Stop flow of gas, using remote valves only.
- Extinguish, using CO₂ or dry chemical fire extinguishers, if safe to do so.
- No attempt will be made to extinguish a continuously burning natural gas leak. A release burning itself off may present less of a hazard than a nonburning leak.

In the event of a large natural gas (or other type) fire, employees will immediately notify the Kings County Fire Department. The project will provide a fully trained internal first response capability designed to cover the period of time before the Kings County Fire Department arrives.

6.17.2.3 Cumulative Impacts

6.17.2.3.1 Project Construction

Other projects that may have impacts that are cumulative with the Project are identified in Section 6.1.4. Because these projects are offsite, cumulative impacts to worker safety are not anticipated during Project construction. Offsite projects have no bearing on worker safety at the Project.

6.17.2.3.2 Project Operation

There will be no cumulative impacts to worker safety during operation of the Project.

6.17.2.4 Project Design Features

The potential for adverse impacts to worker safety will be managed through the safety policies and procedures described herein for Project construction and operations.

6.17.3 MITIGATION MEASURES

Based on the above analysis of impacts and the safety policies and procedures that will be implemented for the Project, no mitigation measures are required.

6.17.4 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse impacts to worker safety are anticipated to result from the Project.

6.17.5 LORS COMPLIANCE

A summary of LORS pertaining to worker safety is provided in Table 6.17-2. The Project will be in compliance with applicable LORS during Project construction and operation. To assist in maintaining compliance, the written worker safety programs will be provided to Cal-OSHA prior to obtaining the facility construction permit. Through the ongoing training, site-specific construction in health and safety plans and the Duke Avenal health and safety plans, the Project will maintain compliance with all applicable LORS for worker safety. Thereafter, self-auditing will be conducted, as required.

The LORS for worker safety do not require the issuance of explicit permits to the Project.

The Cal-OSHA Consultation Services and Cal-OSHA Enforcement, Central Valley Region offices were contacted. Contact information is provided in Table 6.17-3.

TABLE 6.17-2
WORKER SAFETY LORS AND COMPLIANCE

JURIS-DICTION	LORS/AUTHORITY	ADMINISTERING AGENCY ⁽¹⁾	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE	AFC SECTION
Federal	Occupational Health & Safety Act of 1970 (OSHA), 29 USC §651 et. Seq.; 29 CFR 1910 et seq.; 1926 et seq.	Fed-OSHA and Cal-OSHA.	Meet employee health and safety standards for employer-employee communications, electrical operations and chemical exposures.	Implementation of safety/training programs.	6.17.2.1.1, 6.17.2.2.5 Pages 6.17-2 to 6.17-6, 6.17-21 to 6.17-24.
	Department of Labor, Safety and Health Regulations for Construction, Contract Work Hours and Safety Standards Act, §333; 40 USC §327 et seq.	Fed-OSHA and Cal-OSHA.	Meet employee health and safety standards for construction activities. Requirements addressed in CCR, Title 8, General Construction Safety Orders, Chapter 4, Subchapter 4.	Implement construction health and safety programs.	6.17.2.1 Pages 6.17-2 to 6.17-8.
	Uniform Fire Code, Articles 4, 79, 80.	Kings County Fire Department.	Meet requirements for use of flammable and combustible liquids (Article 79) and for the storage and handling of hazardous materials (Article 80).	Follow UFC guidance.	6.17.2.1.1, 6.17.2.1.6, 6.27.2.2.2 Pages 6.17-2, 6.17-8, 6.17-16, 6.17-18.
	National Fire Protection Association.	Kings County Fire Department.	Meet standards necessary to establish a reasonable level of safety and property protection from hazards created by fire and explosion.	Install fire prevention and suppression design and equipment.	6.17.2.2.2 Pages 6.17-17 to 6.17-19.
State	California Code of Regulations (CCR), Title 8, Title 24.	Cal-OSHA.	Meet requirements for a safe and hazard-free working environment. Requirements include General Industry Safety Orders, General Construction Safety Orders, Electrical Safety Orders.	Implement construction and operations health and safety programs.	6.17.2.1, 6.17.2.2 Pages 6.17-2 to 6.17-25.
	CCR, Title 22, Sections 66264.16 and 66270.14.	California Department of Health Services.	Meet requirements for personnel training and recordkeeping.	Implement health and safety training programs.	6.17.2.1.1, 6.17.2.2.5 Pages 6.17-2 to 6.17-6; 6.17-21 to 6.17-24.
Local	Kings County Code - Fire Code of the City.	Kings County Fire Department.	Comply with rules and regulations regarding flammable materials and other fire hazards.	Implement Fire Prevention Plan.	6.17.2.2.2 Pages 6.17-17 to 6.17-19.
Industry	None Applicable	None Applicable	None Applicable	None Applicable	None Applicable

31161/Rpts/AFC/Tbls&Figs (9/27/01/rm)

- (1) Pursuant to CCR Title 20, Appendix B(h)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards and adopted local, regional, state, and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.

TABLE 6.17-3

**ADMINISTRATIVE AGENCY CONTACTS
AND PERMITTING/APPROVAL AUTHORITIES
WORKER SAFETY**

AGENCY AND CONTACTS	PERMITTING/APPROVAL AUTHORITY
Cal/OSHA Consultation Services Central Valley Region Jim Lopes – Area Manager 1901 North Gateway Boulevard Suite 102 Fresno, California 93727 (559) 454-1295 (559) 454-0850 (fax)	Hazardous Identification and Regulatory Enforcement
Cal/OSHA Enforcement Central Valley Region Jerry Walker – District Manager 2550 Mariposa Street Room 4000 Fresno, California 93721 (559) 445-5302 (559) 445-5786 (fax)	Complaint Investigation

6.17.6 REFERENCES

Duke/Fluor Daniel. Construction safety procedures information. Facsimile transmission. January 1999.

TRC Environmental Corporation. *Health and Safety Program*. Updated June 1994.